Prüfbericht-Nr.: *Test report no.*:	**CN25D2HQ 003**	**Auftrags-Nr.:** *Order no.*:	168549449	
Kunden-Referenz-Nr.: *Client reference no.*:	N/A	**Auftragsdatum:** *Order date:*	2025-04-15	
Auftraggeber: *Client*:	Lumi United Technology Co., Ltd. Room 801-804, Building 1, Chongwen Park, Nanshan iPark, No. 3370, Liuxian Avenue, Fuguang Community, Taoyuan Residential District, Nanshan District, Shenzhen, China			
Prüfgegenstand: *Test item*:	Smart Lock U400			
Bezeichnung / Typ-Nr.: *Identification / Type no.*:	DL-D06E, DL-D16E, DL-D06D, DL-D16D, DL-D17D, DL-D15D			
Auftrags-Inhalt: *Order content*:	Test Report			
Prüfgrundlage: *Test specification*:	EN 300 330 V 2.1.1 EN 62479:2010			

Wareneingangsdatum: *Date of sample receipt*:	2025-04-21
Prüfmuster-Nr.: *Test sample no:*	A003967556-004~005 A003968627-001
Prüfzeitraum: *Testing period*:	2025-05-09
Ort der Prüfung: *Place of testing*:	TÜV Rheinland (Shenzhen) Co., Ltd.
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland (Shenzhen) Co., Ltd.
Prüfergebnis*: *Test result**:	Pass

geprüft von: tested by:	X Lin Lin	**genehmigt von:** *authorized by*:	X Andy Yan
Datum: *Date:* 2025-06-12		**Ausstellungsdatum:** *Issue date:* 2025-06-12	
Stellung / Position:	Sachverständige(r)/Expert	**Stellung** / Position:	Sachverständige(r)/Expert

Sonstiges /
Other: This report is for Radio Spectrum and Health of NFC requirements.

Zustand des Prüfgegenstandes bei Anlieferung:
Condition of the test item at delivery: Prüfmuster vollständig und unbeschädigt
Test item complete and undamaged

* Legende:	P(ass) = entspricht o.g. Prüfgrundlage(n)	F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
** Legend:*	*P(ass) = passed a.m. test specification(s)*	*F(ail) = failed a.m. test specification(s)*	*N/A = not applicable*	*N/T = not tested*

Prüfbericht-Nr.: CN25D2HQ 003
Test report no.:

Anmerkungen
Remarks

1	Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben. Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden. *The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system.* *Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.*
2	Wie vertraglich vereinbart, wurde dieses Dokument nur digital unterzeichnet. Der TÜV Rheinland hat nicht überprüft, welche rechtlichen oder sonstigen diesbezüglichen Anforderungen für dieses Dokument gelten. Diese Überprüfung liegt in der Verantwortung des Benutzers dieses Dokuments. Auf Verlangen des Kunden kann der TÜV Rheinland die Gültigkeit der digitalen Signatur durch ein gesondertes Dokument bestätigen. Diese Anfrage ist an unseren Vertrieb zu richten. Eine Umweltgebühr für einen solchen zusätzlichen Service wird erhoben. Informationen zur Verifizierung der Authentizität unserer Dokumente erhalten Sie auf folgender Webseite: go.tuv.com/digital-signature *As contractually agreed, this document has been signed digitally only. TUV Rheinland has not verified and unable to verify which legal or other pertaining requirements are applicable for this document. Such verification is within the responsibility of the user of this document. Upon request by its client, TUV Rheinland can confirm the validity of the digital signature by a separate document. Such request shall be addressed to our Sales department. An environmental fee for such additional service will be charged. For information on verifying the authenticity of our documents, please visit the following website: go.tuv.com/digital-signature*
3	Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben. Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt. *Test clauses with remark of * are subcontracted to qualified subcontractors and descripted under the respective test clause in the report.* *Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.*
4	Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnisen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2023, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezueglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019. *The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2023, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.*

Test Summary

5.1.1 PERMITTED RANGE OF OPERATING FREQUENCIES
RESULT: Pass

5.1.2 OPERATING FREQUENCY RANGES
RESULT: Pass

5.1.3 MODULATION BANDWIDTH
RESULT: Pass

5.1.4 TRANSMITTER H-FIELD REQUIREMENTS
RESULT: Pass

5.1.5 TRANSMITTER RF CARRIER CURRENT
RESULT: Not applicable

5.1.6 TRANSMITTER RADIATED E-FIELD
RESULT: Not applicable

5.1.7 TRANSMITTER CONDUCTED SPURIOUS EMISSIONS
RESULT: Not applicable

5.1.8 TRANSMITTER SPURIOUS EMISSIONS < 30MHZ
RESULT: Pass

5.1.9 TRANSMITTER SPURIOUS EMISSIONS > 30MHZ
RESULT: Pass

5.1.10 TRANSMITTER FREQUENCY STABILITY
RESULT: Not applicable

5.2.1 RECEIVER SPURIOUS EMISSIONS
RESULT: Not applicable

5.2.2 ADJACENT CHANNEL SELECTIVITY
RESULT: Not applicable

5.2.3 BLOCKING OR DESENSITIZATION
RESULT: Not applicable

6.1.1 ELECTROMAGNETIC FIELDS
RESULT: Pass

Contents

1 General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Test Results of NFC.

2 Test Sites

2.1 Test Facilities

TÜV Rheinland (Shenzhen) Co., Ltd.

2-3F, 101 & 102, No.2, Nuclear Power Industrial Park, Fuming Community, Fucheng Street, Longhua District, Shenzhen 518000, China

CNAS Registration No.: L3080

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Radio Spectrum Testing (TS8997)					
Equipment	**Manufacturer**	**Model**	**Serial No.**	**Cal. Date**	**Cal. until**
Wireless Connectivity Tester	R&S	CMW270	101375	2024-09-26	2025-09-25
Signal Analyzer	R&S	FSV 40	101441	2024-09-26	2025-09-25
Vector Signal Generator	R&S	SMBV100A	263301	2024-09-26	2025-09-25
Signal Generator	R&S	SMB100A	115186	2024-09-26	2025-09-25
OSP	R&S	OSP 150	101017	2024-10-31	2025-10-30
Control PC	DELL	OptiPlex 7050	FTJZ9P2	N/A	N/A
Test Software	R&S	WMS32 (V11.00.00)	N/A	N/A	N/A
Power Meter	R&S	NRP2	107105	2024-10-31	2025-10-30
Wideband Power Sensor	R&S	NRP-Z81	105677	2024-09-26	2025-09-25
Shielding Room	Albatross	SR1	APC17151-SR1	2024-09-14	2027-09-13
Unwanted Emission Testing (TS9975)					
Equipment	**Manufacturer**	**Model**	**Serial No.**	**Cal. Date**	**Cal. until**
EMI Test Receiver	R&S	ESR 7	102021	2024-09-29	2025-09-28
Signal Analyzer	R&S	FSV 40	101439	2024-09-29	2025-09-28
System Controller Interface	R&S	SCI-100	S10010038	N/A	N/A
Filterbank	R&S	Wlan	100759	2024-09-29	2025-09-28
OSP	R&S	OSP 120	102040	N/A	N/A
Pre-amplifier	R&S	SCU08F1	08320031	2024-09-29	2025-09-28
Amplifier	R&S	SCU-18F	180070	2024-09-29	2025-09-28
Amplifier	R&S	SCU40A	100475	2024-09-29	2025-09-28
Trilog Broadband Antenna (30 MHz - 7 GHz)	Schwarzbeck	VULB 9162	193	2024-09-28	2025-09-27
Active Loop Antenna	Schwarzbeck	FMZB 1513	302	2024-09-28	2025-09-27
Test software	R&S	EMC32 (V10.60.10)	N/A	N/A	N/A

Control PC	Dell	OptiPlex 7050	36NV9P2	N/A	N/A
3m Semi-Anechoic Chamber	Albatross	SAC-3m	APC17151-SAC	2024-09-14	2027-09-13

2.3 Uncertainty of Measurement

Table 2: Measurement Uncertainty

Parameter	Uncertainty (k=2)
RF output power, conducted	± 0.99 dB
Occupied Channel Bandwidth	± 2.08 %
All emissions, radiated	± 4.17 dB

3 General Product Information

3.1 Product Function and Intended Use

The Product is Smart Lock U400 which supports Bluetooth low energy, Thread, NFC and UWB functions.

Product difference description

Smart Lock U400	Version 1	Version 2	Version 3	Version 4	Version 5	Version 6
Model	DL-D06E	DL-D16E	DL-D06D	DL-D16D	DL-D17D	DL-D15D
Color	Black	Silver	Black	Silver	Shadow Black	Satin Nickel
Finishing	Matte (Spray Coating)		Matte (Spray Coating)		Brushed (Electroplating)	
Package content difference	Li-ion Battery × 1		Li-ion Battery × 1 + Hub M100 × 1		Li-ion Battery × 2	
External Panel						
Shape	Curved		Flat		Flat	
Main Body Material	Aluminium		Aluminium		Zinc	
Gliding Plate Material	Aluminium		Zinc		Zinc	
Keypad Material	PC + PET		PMMA		PMMA	
Internal Panel						
Main Body Material	Plastic					
Knob	Aluminium		Aluminium		Zinc	

For details refer to the User Manual, Technical Description and Circuit Diagram.

3.2 Ratings and System Details

Table 3: Technical Specification of EUT

General Information of EUT	Value
Kind of Equipment:	Smart Lock U400
Type Designation:	DL-D06E, DL-D16E, DL-D06D, DL-D16D, DL-D17D, DL-D15D Note1: The differences between the products refer to above table. Note2: Select model DL-D06E as the main test model.
Operating Voltage:	Battery operated (7.3Vdc, 4880mAh) or USB-C operated (5V)
Operating Temperature Range:	-35 °C ~ +66 °C
Technical Specification of NFC	
Permitted Frequency Band:	13.553 to 13.567MHz
Operating Frequency:	13.56 MHz
Type of Modulation:	ASK
Channel Number:	1 channel
Antenna Type:	Coil Antenna

Note: The correctness of all data provided by customer in the test report is ensured and responsible of the customer. Any misjudgment of the test results caused by the use of incorrect data provided by customer shall be borne by the customer.

3.3 Independent Operation Modes

The basic operation modes are:

A. On, NFC
   1. Operating mode
   2. Standby mode

B. Off

3.4 Noise Generating and Noise Suppressing Parts

For details refer to the sample inside.

3.5 Submitted Documents

- Application Form
- Operation Description
- User Manual
- Rating Label

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

Radio Spectrum: The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5 and chapter 7.

According to clause 3.1, all tests were performed on model *DL-D06E* in this report.

4.3 Special Accessories and Auxiliary Equipment

Table 4: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N
Laptop	Lenovo	T480	PF-16A6N8

4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

5 Test Results ERM

5.1 Transmitter Requirement & Test Suites

5.1.1 Permitted Range of Operating Frequencies

RESULT: **Pass**

Test Specification

Test standard	:	EN 300 330 V2.1.1
Test requirement	:	EN 300 330 V2.1.1, Clause 4.3.1
Limit	:	EN 300 330 V2.1.1, Clause 4.3.1.3
Test suites	:	EN 300 330 V2.1.1, Clause 6.2.2

Test Setup

Date of testing	:	2025-05-09
Test voltage	:	Battery operated (7.3Vdc)
Test environment	:	Normal temperature
Operation mode	:	A.1
Ambient temperature	:	24 ℃
Relative humidity	:	50 %
Atmospheric pressure	:	101 kPa

The permitted range of operating frequencies for intentional emissions entirely within the frequency bands in table 1.
The test data refer to clause 5.1.2.

5.1.2 Operating Frequency Ranges

RESULT: **Pass**

Test Specification

Test standard	:	EN 300 330 V2.1.1
Test requirement	:	EN 300 330 V2.1.1, Clause 4.3.2
Limit	:	EN 300 330 V2.1.1, Clause 4.3.2.3
Test suites	:	EN 300 330 V2.1.1, Clause 6.2.2

Test Setup

Date of testing	:	2025-05-09
Test voltage	:	Battery operated (7.3Vdc)
Test environment	:	Normal temperature
Operation mode	:	A.1
Ambient temperature	:	24 ℃
Relative humidity	:	50 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A.

5.1.3 Modulation Bandwidth

RESULT: **Pass**

Test Specification

Test standard	:	EN 300 330 V2.1.1
Test requirement	:	EN 300 330 V2.1.1, Clause 4.3.3
Limit	:	EN 300 330 V2.1.1, Clause 4.3.3.3
Test suites	:	EN 300 330 V2.1.1, Clause 6.2.3

Test Setup

Date of testing	:	2025-05-09
Test voltage	:	Battery operated (7.3Vdc)
Test environment	:	Normal temperature
Operation mode	:	A.1
Ambient temperature	:	24 ℃
Relative humidity	:	50 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A.

5.1.4 Transmitter H-field Requirements

RESULT: **Pass**

Test Specification

Test standard	:	EN 300 330 V2.1.1
Test requirement	:	EN 300 330 V2.1.1, Clause 4.3.4
Limit	:	EN 300 330 V2.1.1, Clause 4.3.4.3
Test suites	:	EN 300 330 V2.1.1, Clause 6.2.4

Test Setup

Date of testing	:	2025-05-09
Test voltage	:	Battery operated (7.3Vdc)
Test environment	:	Normal temperature
Operation mode	:	A.1
Ambient temperature	:	24 ℃
Relative humidity	:	50 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A.

5.1.5 Transmitter RF Carrier Current

RESULT: **Not applicable**

Test Specification

Test standard	:	EN 300 330 V2.1.1
Test requirement	:	EN 300 330 V2.1.1, Clause 4.3.5
Limit	:	EN 300 330 V2.1.1, Clause 4.3.5.3
Test suites	:	EN 300 330 V2.1.1, Clause 6.2.5

Note: the EUT is Class 1 Product, according to clause 4.3.5.1 of EN 300 330 V2.1.1: 2017, this requirement is applied to Product Class 3 only, hence this requirement is not applicable.

5.1.6 Transmitter Radiated E-field

RESULT: **Not applicable**

Test Specification

Test standard	:	EN 300 330 V2.1.1
Test requirement	:	EN 300 330 V2.1.1, Clause 4.3.6
Limit	:	EN 300 330 V2.1.1, Clause 4.3.6.3
Test suites	:	EN 300 330 V2.1.1, Clause 6.2.6

Note: the EUT is Class 1 Product, according to clause 4.3.6.1 of EN 300 330 V2.1.1: 2017, this requirement is applied to Product Class 4 only, hence this requirement is not applicable.

5.1.7 Transmitter Conducted Spurious Emissions

RESULT: **Not applicable**

Test Specification

Test standard	:	EN 300 330 V2.1.1
Test requirement	:	EN 300 330 V2.1.1, Clause 4.3.7
Limit	:	EN 300 330 V2.1.1, Clause 4.3.7.3
Test suites	:	EN 300 330 V2.1.1, Clause 6.2.7

Note: the EUT is Class 1 Product, according to clause 4.3.7.1 of EN 300 330 V2.1.1: 2017, this requirement is applied to Product Class 3 only, hence this requirement is not applicable.

5.1.8 Transmitter Spurious Emissions < 30MHz

RESULT: **Pass**

Test Specification

Test standard	:	EN 300 330 V2.1.1
Test requirement	:	EN 300 330 V2.1.1, Clause 4.3.8
Limit	:	EN 300 330 V2.1.1, Clause 4.3.8.3
Test suites	:	EN 300 330 V2.1.1, Clause 6.2.8

Test Setup

Date of testing	:	2025-05-09
Test voltage	:	Battery operated (7.3Vdc)
Test environment	:	Normal temperature
Operation mode	:	A.1, A2
Ambient temperature	:	24 ℃
Relative humidity	:	50 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A.

5.1.9 Transmitter Spurious Emissions > 30MHz

RESULT: **Pass**

Test Specification

Test standard	:	EN 300 330 V2.1.1
Test requirement	:	EN 300 330 V2.1.1, Clause 4.3.9
Limit	:	EN 300 330 V2.1.1, Clause 4.3.9.3
Test suites	:	EN 300 330 V2.1.1, Clause 6.2.9

Test Setup

Date of testing	:	2025-05-09
Test voltage	:	Battery operated (7.3Vdc)
Test environment	:	Normal temperature
Operation mode	:	A.1, A2
Ambient temperature	:	24 ℃
Relative humidity	:	50 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A.

5.1.10 Transmitter Frequency stability

RESULT: **Not applicable**

Test standard	:	EN 300 330 V2.1.1
Test requirement	:	EN 300 330 V2.1.1, Clause 4.3.10
Limit	:	EN 300 330 V2.1.1, Clause 4.3.10.3
Test suites	:	EN 300 330 V2.1.1, Clause 6.2.10

Note: The EUT is not a channelized systems, according to clause 4.3.10.1 of EN 300 330 V2.1.1: 2017, this requirement is applied to channelized systems only, hence this requirement is not applicable.

5.2 Receiver Requirement & Test Suites

5.2.1 Receiver Spurious Emissions

RESULT: **Not applicable**

Test Specification

Test standard	:	EN 300 330 V2.1.1
Test requirement	:	EN 300 330 V2.1.1, Clause 4.4.2
Limit	:	EN 300 330 V2.1.1, Clause 4.4.2.3
Test suites	:	EN 300 330 V2.1.1, Clause 6.3.1

Note: This EUT receiver co-located with transmitter, according to clause 4.4.2.1 of EN 300 330 V2.1.1: 2017, this requirement is applied receivers which a not co-located with transmitters, hence this requirement is not applicable.

5.2.2 Adjacent channel selectivity

RESULT: **Not applicable**

Test Specification

Test standard	:	EN 300 330 V2.1.1
Test requirement	:	EN 300 330 V2.1.1, Clause 4.4.3
Limit	:	EN 300 330 V2.1.1, Clause 4.4.3.3
Test suites	:	EN 300 330 V2.1.1, Clause 6.3.2

Note: The EUT is not a channelized systems, according to clause 4.4.3.1 of EN 300 330 V2.1.1: 2017, this requirement is applied to channelized systems only, hence this requirement is not applicable.

5.2.3 Blocking or desensitization

RESULT: **Not applicable**

Test Specification

Test standard	:	EN 300 330 V2.1.1
Test requirement	:	EN 300 330 V2.1.1, Clause 4.4.4
Limit	:	EN 300 330 V2.1.1, Clause 4.4.4.3
Test suites	:	EN 300 330 V2.1.1, Clause 6.3.3

Note: The EUT is not a channelized systems, according to clause 4.4.4.1 of EN 300 330 V2.1.1: 2017, this requirement is applied to channelized systems only, hence this requirement is not applicable.

6 Safety Human Exposure

6.1 Human Exposure to Electromagnetic Fields 10MHz-300GHz

6.1.1 Electromagnetic Fields

RESULT: **Pass**

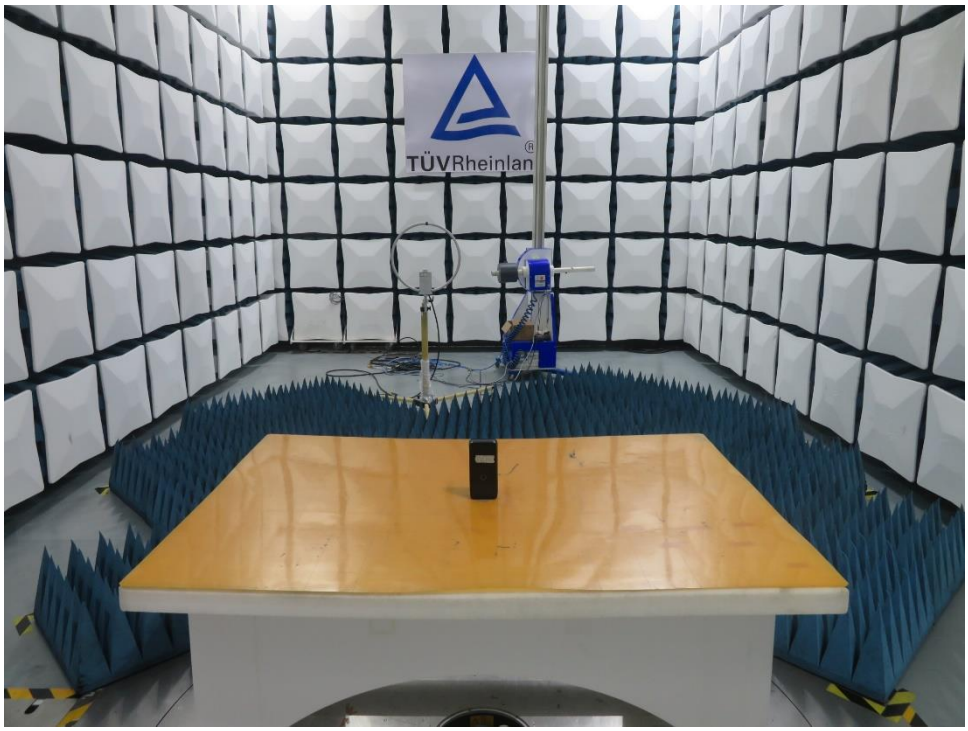
Test Specification

Test standard : EN 62479: 2010

The maximum measured power of EUT is far below the SAR test exclusion threshold level (20mW). So, According to EN 62479:2010 clause 4.2, if the average total radiated power emitted by apparatus operating in the frequency range 10MHz-300GHz is less than or equal to 13.01dBm(20mW), then the apparatus is deemed to comply with the basic restrictions without testing.

7 Photographs of the Test Set-Up

Photograph 1: Set-up for Spurious Emissions, Below 30MHz



Photograph 2: Set-up for Spurious Emissions, Above 30MHz

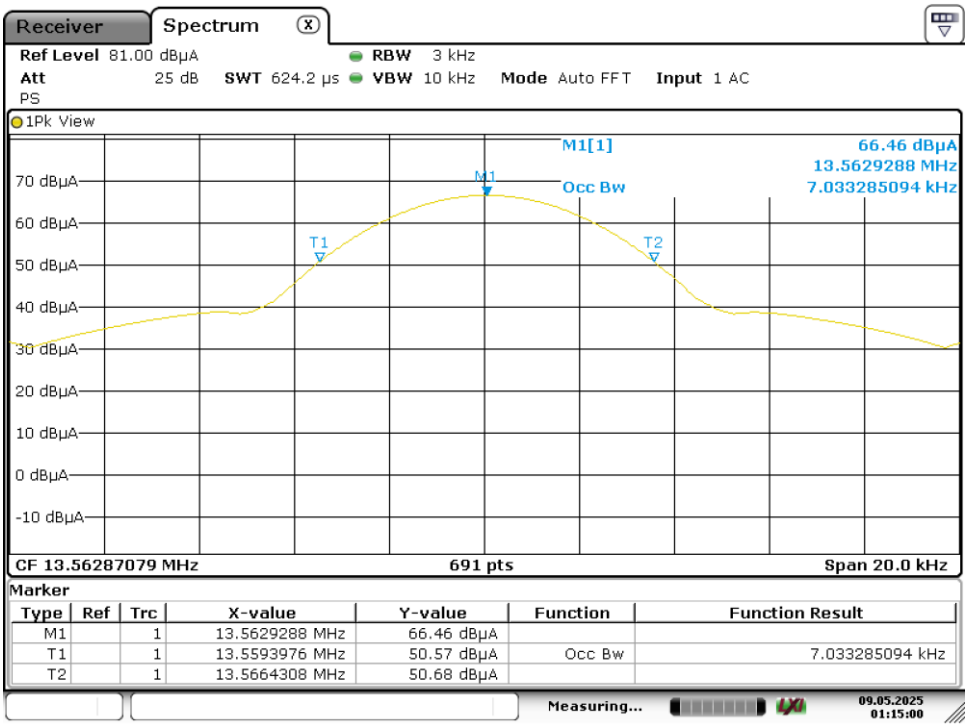
8 List of Tables

9 List of Photographs

Appendix A: Test Results of NFC

Appendix A.1: Test Results of Operating Frequency Ranges

Test Conditions	Frequency Range				Verdict
	f_L Channel (MHz)	f_H Channel (MHz)	f_L Limit (MHz)	f_H Limit (MHz)	
Normal	13.559	13.566	13.553	13.567	Pass



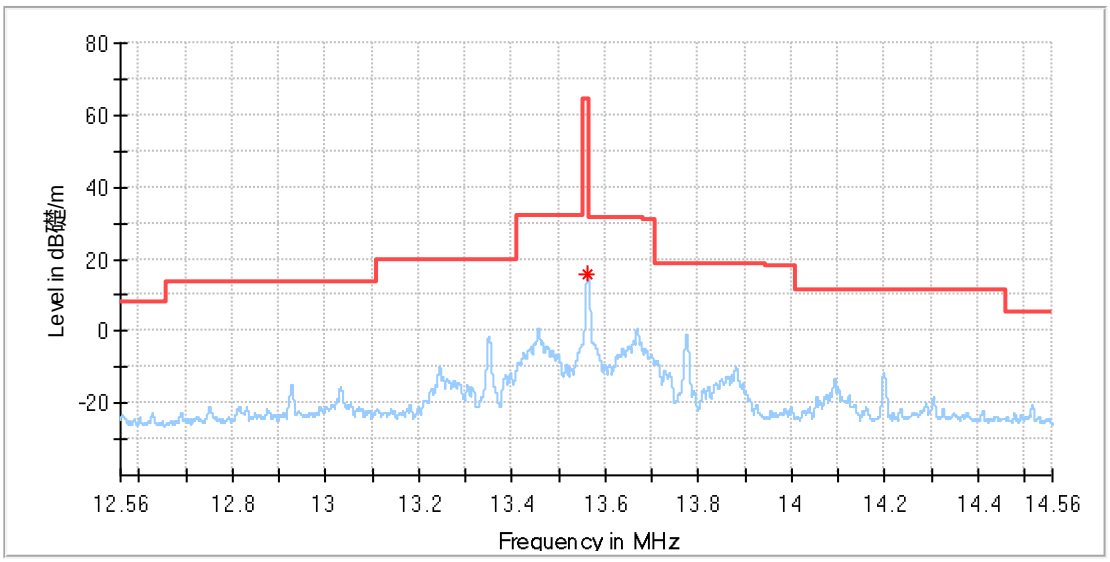
Date: 9.MAY.2025 01:15:00

Appendix A.2: Test Results of Modulation Bandwidth

Operating mode

EUT Information

EUT Name:	Smart Lock U400
Model:	DL-D06E
Test Mode:	NFC
Order No/Sample No:	168549449/A003968627-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	EN 300330
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

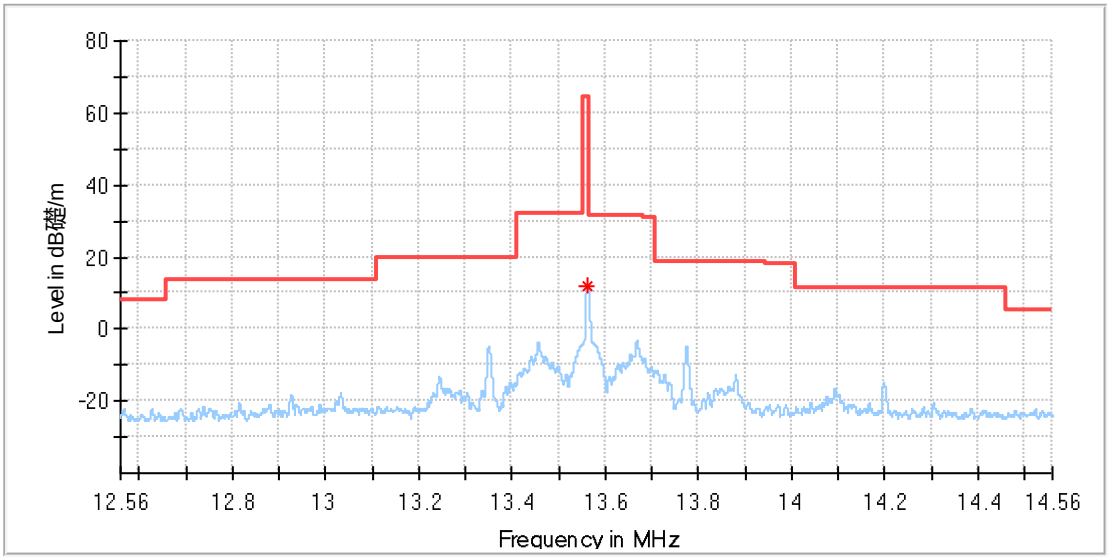
Frequency (MHz)	MaxPeak (dBµA/m)	Limit (dBµA/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
13.562941	15.68	64.52	48.84	100.0	X	177.0	-31.1

Final_Result

Frequency (MHz)	QuasiPeak (dBµA/m)	Limit (dBµA/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	Smart Lock U400
Model:	DL-D06E
Test Mode:	NFC
Order No/Sample No:	168549449/A003968627-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	EN 300330
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

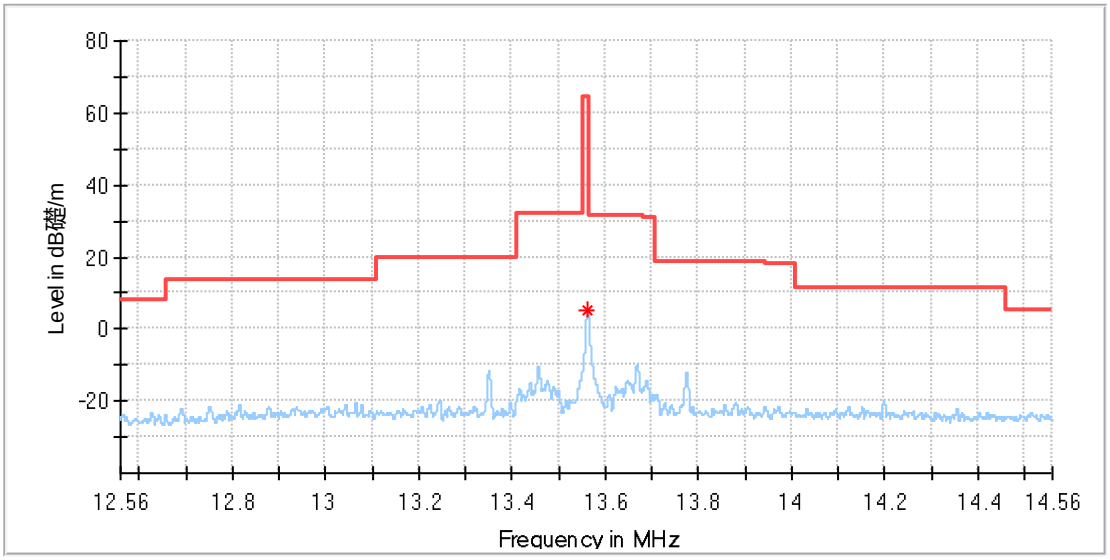
Frequency (MHz)	MaxPeak (dBµA/m)	Limit (dBµA/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
13.562941	12.18	64.52	52.34	100.0	Y	272.0	-31.1

Final_Result

Frequency (MHz)	QuasiPeak (dBµA/m)	Limit (dBµA/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	Smart Lock U400
Model:	DL-D06E
Test Mode:	NFC
Order No/Sample No:	168549449/A003968627-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	EN 300330
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµA/m)	Limit (dBµA/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
13.562941	5.08	64.52	59.44	100.0	Z	160.0	-31.1

Final_Result

Frequency (MHz)	QuasiPeak (dBµA/m)	Limit (dBµA/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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Appendix A.3: Test Results of Transmitter H-field Requirements

Operating mode					
Frequency (MHz)	**Reading Level (dBµA/m@3m)**	**Corrected Factor to 10m (dB)**	**Result (dBµA/m@10m)**	**Limit (dBµA/m@10m)**	**Verdict**
13.56	14.92	23.10	-8.18	42	Pass

Note: Refer to EN 300 330, Annex H.2, H3m = H10m +C3 (C3 ≈ 23.1dB)

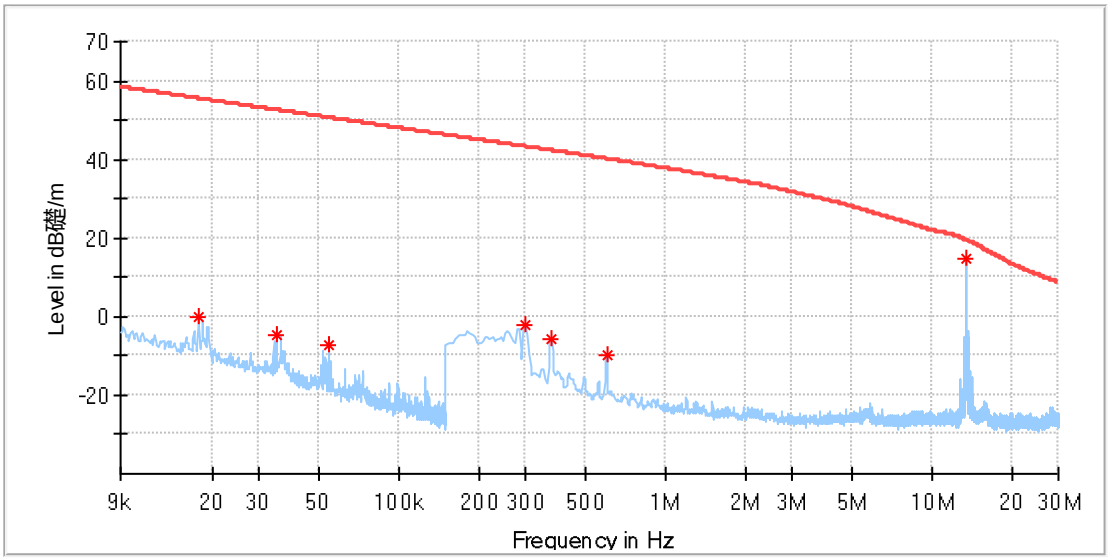
Appendix A.4: Test Results of Transmitter Spurious Emissions < 30MHz

Remark: 13.56MHz is fundamental frequency and don't consider in this test item.

Operating mode

EUT Information

EUT Name:	Smart Lock U400
Model:	DL-D06E
Test Mode:	NFC
Order No/Sample No:	168549449/A003968627-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	EN 300330
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµA/m)	Limit (dBµA/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.017661	-0.12	55.44	55.56	100.0	X	0.0	-31.3
0.034682	-4.45	52.50	56.95	100.0	X	0.0	-31.3
0.054422	-7.28	50.55	57.82	100.0	X	0.0	-31.3
0.299250	-2.14	43.15	45.30	100.0	X	214.0	-31.3
0.373875	-5.90	42.18	48.08	100.0	X	142.0	-31.3
0.602140	-9.59	40.09	49.68	100.0	X	193.0	-31.4
13.560552	14.92	19.38	4.47	100.0	X	4.0	-31.1

Final_Result

Frequency (MHz)	QuasiPeak (dBµA/m)	Limit (dBµA/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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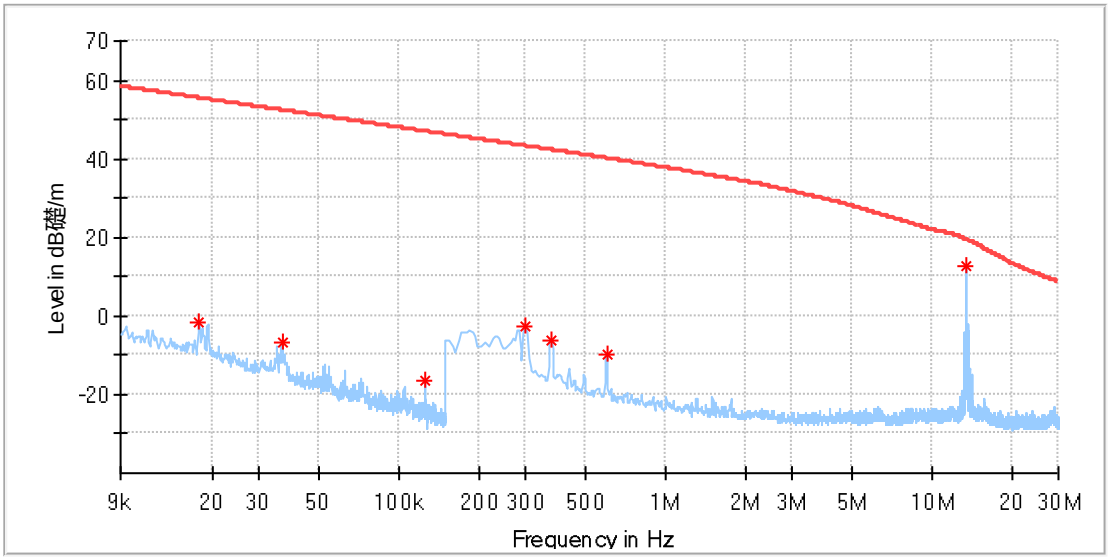
EUT Information

EUT Name:	Smart Lock U400
Model:	DL-D06E
Test Mode:	NFC
Order No/Sample No:	168549449/A003968627-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	EN 300330
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµA/m)	Limit (dBµA/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.017762	-1.69	55.42	57.11	100.0	Y	79.0	-31.3
0.036696	-6.73	52.26	58.98	100.0	Y	190.0	-31.3
0.125023	-16.43	46.93	63.35	100.0	Y	186.0	-31.3
0.299250	-2.85	43.15	46.01	100.0	Y	33.0	-31.3
0.373875	-6.03	42.18	48.21	100.0	Y	330.0	-31.3
0.602140	-9.78	40.09	49.87	100.0	Y	235.0	-31.4
13.560552	12.78	19.38	6.60	100.0	Y	78.0	-31.1

Final_Result

Frequency (MHz)	QuasiPeak (dBµA/m)	Limit (dBµA/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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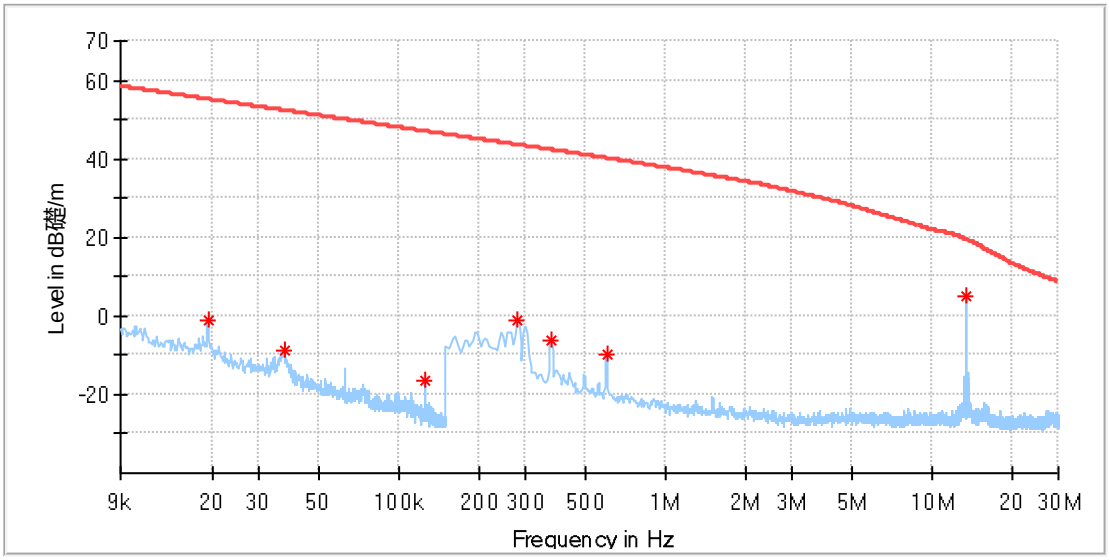
EUT Information

EUT Name:	Smart Lock U400
Model:	DL-D06E
Test Mode:	NFC
Order No/Sample No:	168549449/A003968627-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	EN 300330
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµA/m)	Limit (dBµA/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.019172	-1.22	55.09	56.30	100.0	Z	240.0	-31.3
0.036999	-8.72	52.22	60.94	100.0	Z	251.0	-31.3
0.125023	-16.42	46.93	63.35	100.0	Z	341.0	-31.3
0.277302	-1.22	43.48	44.70	100.0	Z	149.0	-31.3
0.373875	-6.06	42.18	48.24	100.0	Z	64.0	-31.3
0.602140	-9.84	40.09	49.93	100.0	Z	168.0	-31.4
13.560552	5.07	19.38	14.31	100.0	Z	181.0	-31.1

Final_Result

Frequency (MHz)	QuasiPeak (dBµA/m)	Limit (dBµA/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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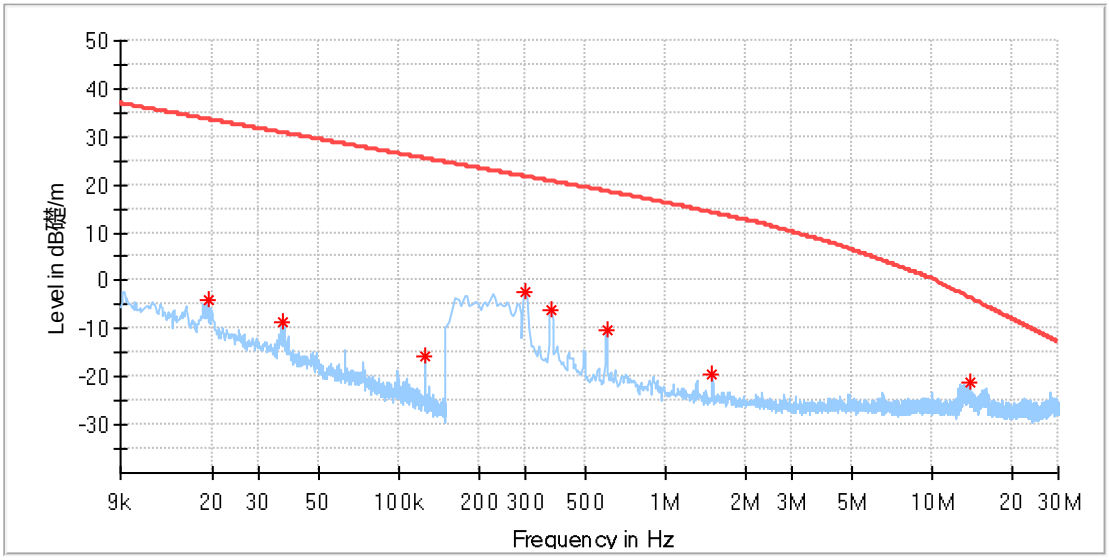
Standby mode

EUT Information

EUT Name:	Smart Lock U400
Model:	DL-D06E
Test Mode:	NFC
Order No/Sample No:	168549449/A003968627-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	EN 300330
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµA/m)	Limit (dBµA/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.019172	-3.99	33.59	37.58	100.0	X	36.0	-31.3
0.036797	-8.69	30.75	39.44	100.0	X	82.0	-31.3
0.125023	-15.93	25.43	41.36	100.0	X	280.0	-31.3
0.299250	-2.32	21.65	23.97	100.0	X	85.0	-31.3
0.373875	-5.95	20.68	26.63	100.0	X	235.0	-31.3
0.602140	-10.07	18.59	28.66	100.0	X	249.0	-31.4
1.506419	-19.46	14.12	33.58	100.0	X	36.0	-31.4
13.911728	-21.08	-3.53	17.54	100.0	X	57.0	-31.1

Final_Result

Frequency (MHz)	QuasiPeak (dBµA/m)	Limit (dBµA/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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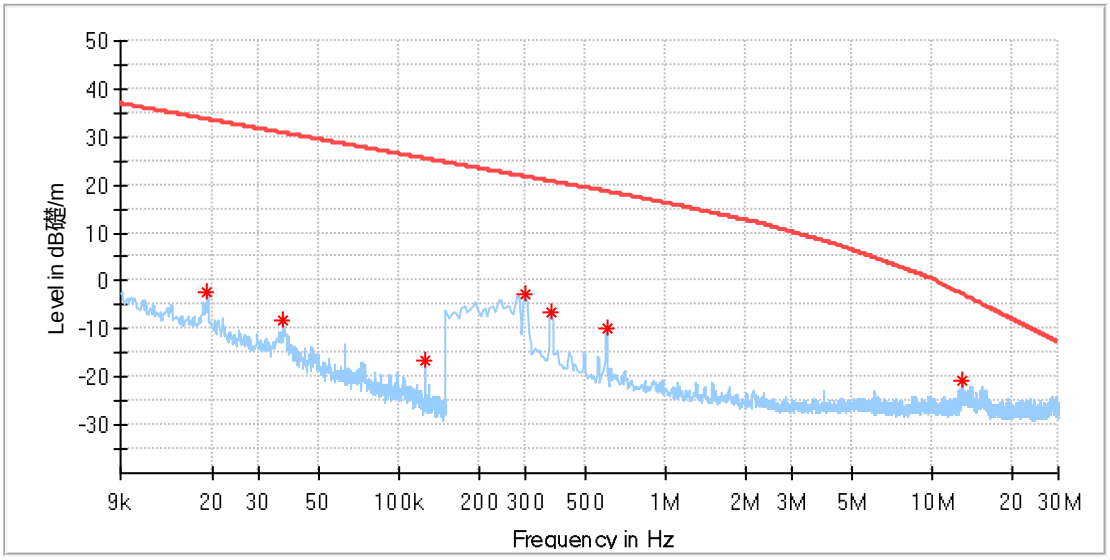
EUT Information

EUT Name:	Smart Lock U400
Model:	DL-D06E
Test Mode:	NFC
Order No/Sample No:	168549449/A003968627-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	EN 300330
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµA/m)	Limit (dBµA/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.019071	-2.26	33.61	35.87	100.0	Y	71.0	-31.3
0.036696	-8.36	30.76	39.11	100.0	Y	71.0	-31.3
0.125023	-16.40	25.43	41.83	100.0	Y	208.0	-31.3
0.299250	-2.91	21.65	24.56	100.0	Y	36.0	-31.3
0.373875	-6.42	20.68	27.10	100.0	Y	27.0	-31.3
0.602140	-10.04	18.59	28.63	100.0	Y	271.0	-31.4
13.130360	-20.57	-2.84	17.74	100.0	Y	8.0	-31.1

Final_Result

Frequency (MHz)	QuasiPeak (dBµA/m)	Limit (dBµA/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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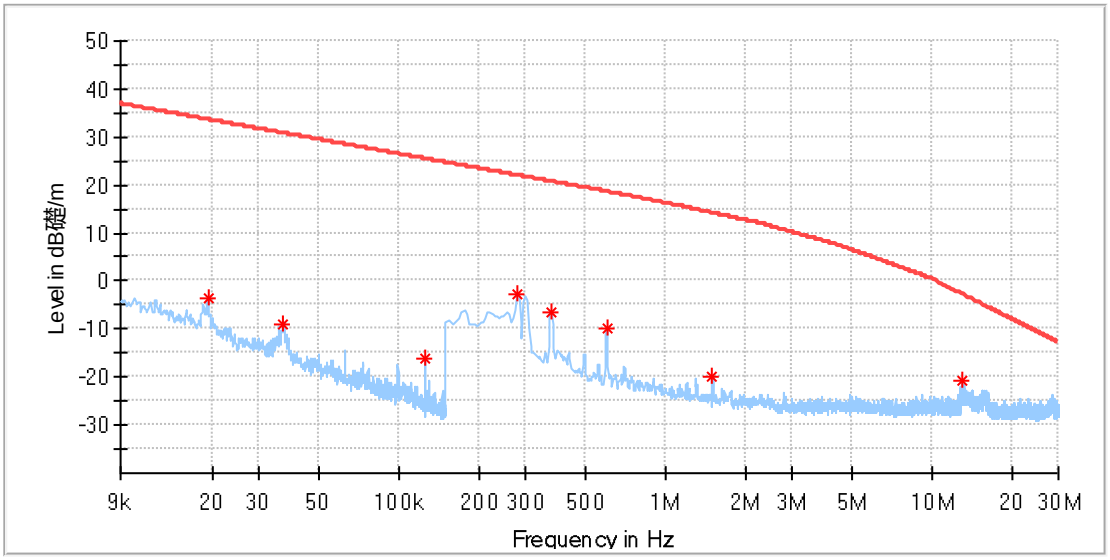
EUT Information

EUT Name:	Smart Lock U400
Model:	DL-D06E
Test Mode:	NFC
Order No/Sample No:	168549449/A003968627-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	EN 300330
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµA/m)	Limit (dBµA/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.019172	-3.56	33.59	37.14	100.0	Z	0.0	-31.3
0.036696	-8.90	30.76	39.66	100.0	Z	82.0	-31.3
0.125023	-16.26	25.43	41.69	100.0	Z	28.0	-31.3
0.277302	-2.73	21.98	24.71	100.0	Z	209.0	-31.3
0.373875	-6.31	20.68	26.99	100.0	Z	0.0	-31.3
0.602140	-9.72	18.59	28.31	100.0	Z	0.0	-31.4
1.506419	-19.93	14.12	34.05	100.0	Z	179.0	-31.4
13.130360	-20.77	-2.84	17.93	100.0	Z	263.0	-31.1

Final_Result

Frequency (MHz)	QuasiPeak (dBµA/m)	Limit (dBµA/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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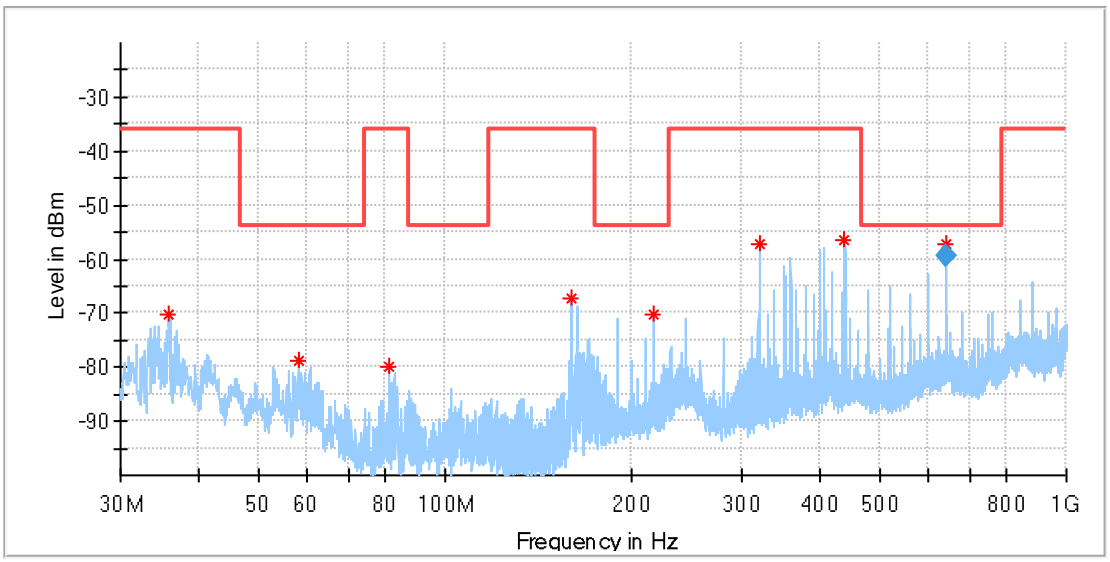
Appendix A.5: Test Results of Transmitter Spurious Emissions > 30MHz

Operating mode

EUT Information

EUT Name:	Smart Lock U400
Model:	DL-D06E
Test Mode:	NFC
Order No/Sample No:	168549449/A003968627-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	EN 300330
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

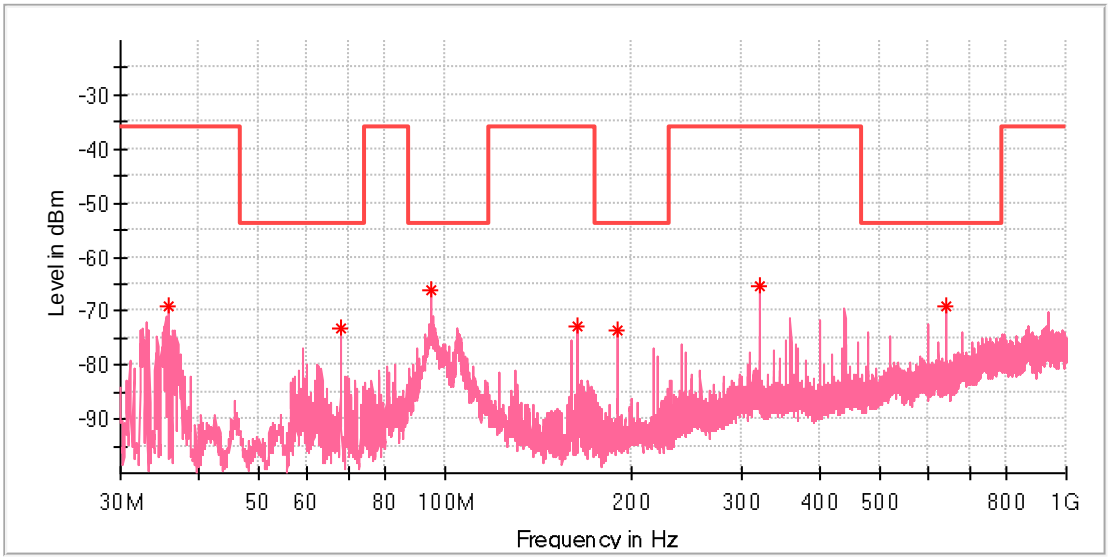
Frequency (MHz)	RMS (dBm)	DET 2 (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
35.820000	-70.39	---	-36.00	34.39	150.0	H	0.0	-113.5
58.218182	-78.87	---	-54.00	24.87	150.0	H	46.0	-116.7
81.365909	-79.93	---	-36.00	43.93	150.0	H	0.0	-123.5
160.024091	-67.30	---	-36.00	31.30	150.0	H	8.0	-122.8
216.989546	-70.25	---	-54.00	16.25	150.0	H	0.0	-114.4
319.985909	-57.31	---	-36.00	21.31	150.0	H	0.0	-114.1
440.001364	-56.32	---	-36.00	20.32	150.0	H	31.0	-110.0
639.997727	-57.09	---	-54.00	3.09	150.0	H	0.0	-104.5

Final_Result

Frequency (MHz)	QuasiPeak (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
639.997727	-59.33	-54.00	5.33	145.0	H	-1.0	-104.5

EUT Information

EUT Name:	Smart Lock U400
Model:	DL-D06E
Test Mode:	NFC
Order No/Sample No:	168549449/A003968627-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	EN 300330
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	RMS (dBm)	DET 2 (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
35.775909	-69.03	---	-36.00	33.03	150.0	V	139.0	-125.9
67.785909	-73.39	---	-54.00	19.39	150.0	V	154.0	-122.7
94.945909	-66.14	---	-54.00	12.14	150.0	V	154.0	-99.7
162.757727	-72.98	---	-36.00	36.98	150.0	V	139.0	-120.3
189.873636	-73.40	---	-54.00	19.40	150.0	V	139.0	-119.1
319.985909	-65.41	---	-36.00	29.41	150.0	V	82.0	-111.6
639.997727	-68.93	---	-54.00	14.93	150.0	V	82.0	-107.0

Final_Result

Frequency (MHz)	QuasiPeak (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
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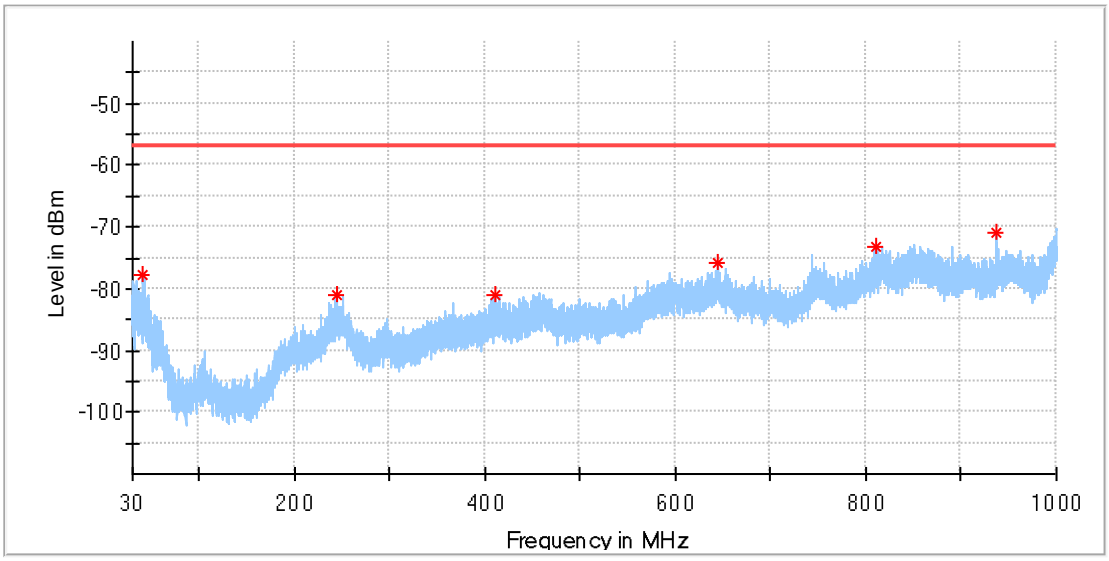
Standby mode

EUT Information

EUT Name:	Smart Lock U400
Model:	DL-D06E
Test Mode:	NFC
Order No/Sample No:	168549449/A003968627-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	EN 300330
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
41.507727	-77.92	-57.00	20.92	150.0	H	348.0	-112.3
244.810909	-81.06	-57.00	24.06	150.0	H	211.0	-109.9
410.901364	-81.04	-57.00	24.04	150.0	H	299.0	-109.5
645.420909	-75.96	-57.00	18.96	150.0	H	173.0	-104.3
811.246818	-73.18	-57.00	16.18	150.0	H	323.0	-101.4
937.523182	-70.80	-57.00	13.80	150.0	H	265.0	-101.8

Final_Result

Frequency (MHz)	QuasiPeak (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
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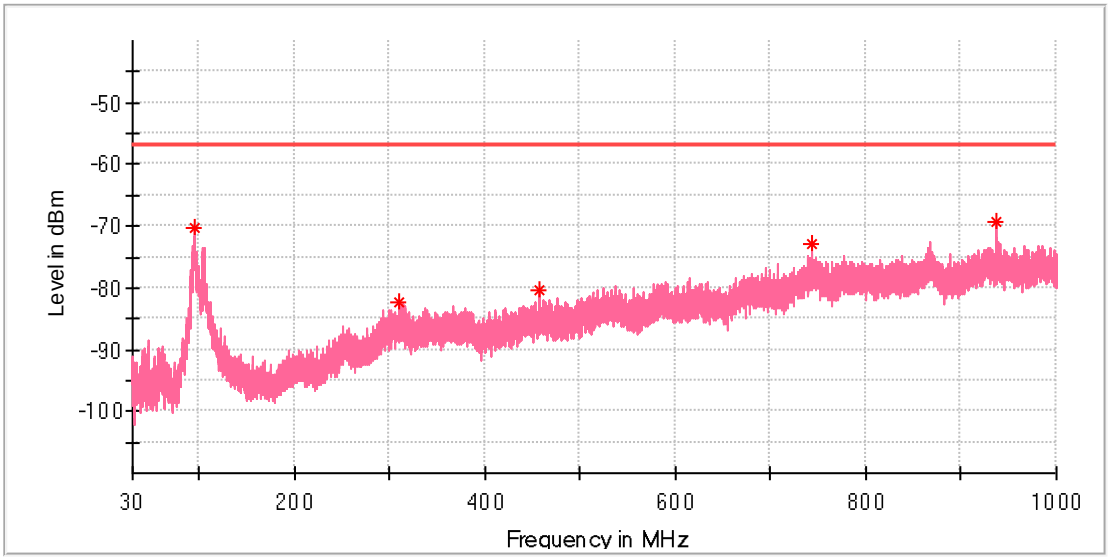
EUT Information

EUT Name:	Smart Lock U400
Model:	DL-D06E
Test Mode:	NFC
Order No/Sample No:	168549449/A003968627-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	EN 300330
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
95.695455	-70.20	-57.00	13.20	150.0	V	346.0	-100.7
309.404091	-82.29	-57.00	25.29	150.0	V	0.0	-111.3
458.078636	-80.51	-57.00	23.51	150.0	V	330.0	-109.8
742.509091	-72.91	-57.00	15.91	150.0	V	113.0	-101.9
937.523182	-69.17	-57.00	12.17	150.0	V	55.0	-100.4

Final_Result

Frequency (MHz)	QuasiPeak (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
---	---	---	---	---		---	---